

# SMX93-RGBW

Color Change Surface Mount



10 - 31 VOLT  
**IP-68**

## M Class Color Change Surface Mount Underwater Light

### INSTALLATION AND OPERATION INSTRUCTIONS

Congratulations! You have purchased a LUMISHORE advanced LED technology underwater lighting system. Every care has been taken to ensure your compact SMX 93 LED lights arrive in perfect condition, so please enjoy the ultimate experience in underwater lighting.

Adding underwater lighting to your vessel has never been easier - one small cable hole and three mounting screws is all it takes.

Please read the following pages to ensure a complete understanding of the LUMISHORE LED lighting system before installation.

#### Before you Start

- Always ensure that the vessel's power source and battery are disconnected or isolated prior to installation
- A qualified professional should carry out both the electrical and mechanical installation.
- For best underwater illumination, LUMISHORE recommends installation 4" to 12" (100-300mm) below the minimum load water line.
- Choose a location - The light must be mounted on a flat (not curved) surface. For underwater installs mount on transom or side hull only.
- A hole will be drilled to allow the cable to be inserted; care must be taken to ensure there is unrestricted access inside the hull.
- When installing three or more lights, equal spacing 2.5'- 3' is recommended to give a consistent light pool.
- The light is temperature sensitive and must not be located close to the exhaust outlet or other heat source.
- SMX 93 Lights operate on 12V DC or 24V DC. Never connect a light directly to the mains AC voltage, or DC voltage other than that specified.
- Each light should be individually fused. See electrical installation section for further information.
- For Installation on boats up to 7.5m (25 ft). Isolation kit (39-0203) MUST be used on boats with conductive hulls.

# LUMISHORE

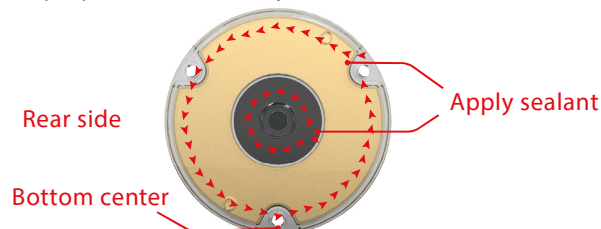
### Mechanical Installation

Tools: Drill, drill bits, marine sealant (3M 4200, or equivalent), F2 Frearson type screwdriver, Flat head screw driver, rags for clean-up:  
Pilot Hole for Screws - 9/64" / 3.5mm  
Hole for Cable - 7/32" / 5.5mm  
Recess for Gland - 17/32" / 13.5mm hole to a depth of 5/8" / 15mm

1. Select a suitable flat surface that is accessible from behind and ensure the cable can be run without a problem.

2. With one hole at the bottom centre, mark and drill the pilot holes for the screws & drill a  $\varnothing 4$ mm counterbore to a depth of 5mm in each location. Drill the power cable hole. The cable hole must be recessed and chamfered on the outside of the hull to accept the cable gland on the back of the light. When fitted the lights should sit flush.  
Note: Cored hulls must be sealed prior to fitting the lights - refer to the manufacturers instructions.

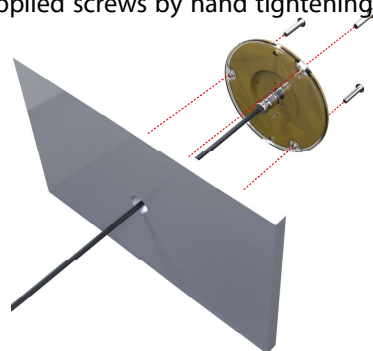
3. Clean and prepare the hull ready for the sealant.



4. Apply a continuous thick bead of sealant to the back of the light, making sure the recess on the outer edge is slightly overfilled. Also apply a bead of sealant around the cable gland. Refer to image above.

5. Push the power cable through the hole and align the light with the pilot hole screws.

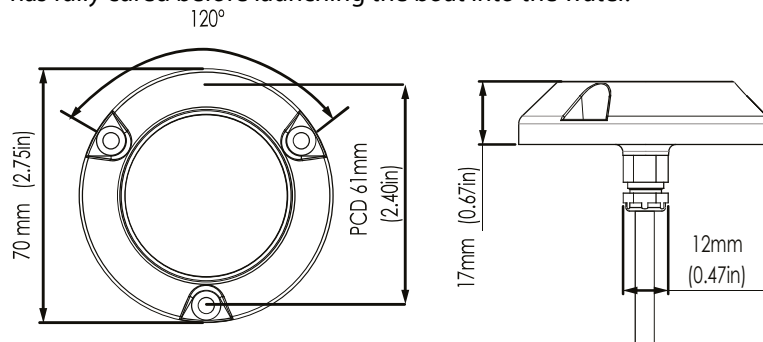
6. Attach the light using the 3 supplied screws by hand tightening with a screwdriver.



**IMPORTANT: Do Not Over Tighten. Do Not Use Power Tools to tighten screws.**

7. Use a damp cloth to wipe off excess sealant that has squeezed out around the light. DO NOT use chemical cleaners or solvents.

**IMPORTANT: Refer to the directions on the sealant to make sure it has fully cured before launching the boat into the water.**



Electrical Installation

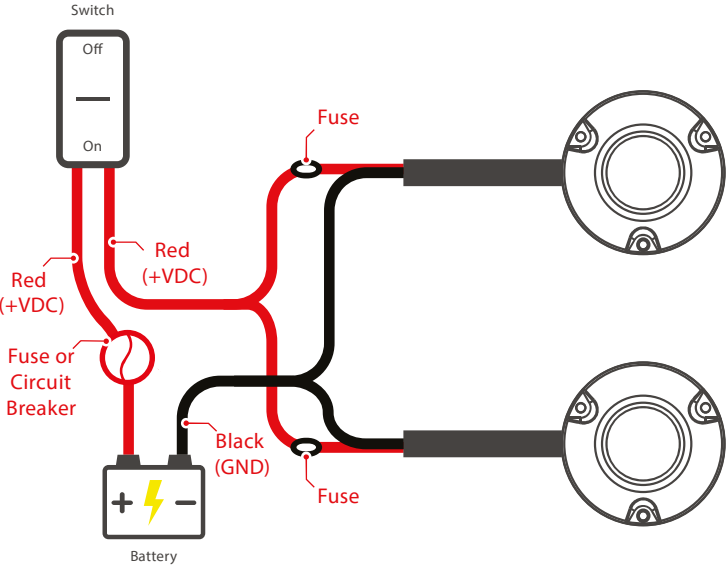
Plan the cable route prior to installation. Ensure all cables are correctly rated. Each light must be individually fused. The cable connections are:

Red	12V or 24 V DC
Black	Ground

The fuse ratings are:	12 V DC	4A
	24 V DC	3A

An ON / OFF switch must be used. The light has different modes which are selected by operating the ON / OFF switch.

All connections must be made waterproof.

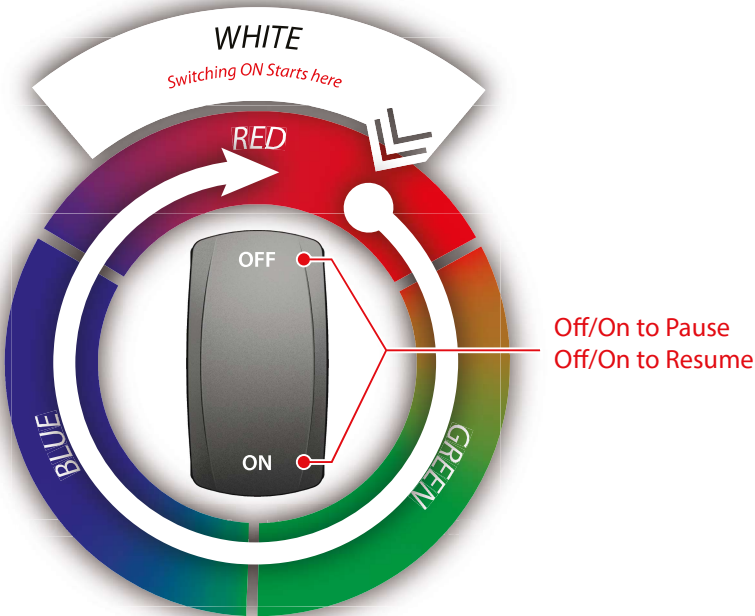


The light cables can be extended. Ensure the correct cable gauge is used to avoid issues with voltage drop. Follow ABYC recommendations for no more than 3% voltage drop for 12 VDC, and 10% for 24 VDC installations. Consult a qualified electrical installer, or contact Lumishore for further information.

Make sure the lights are tested, and working as expected before the boat goes back in the water.

Operating the Lights

The lights operate in a preset color cycle, always starting in white. The lights then go into a colour cycle. The lights can be paused on any colour in the cycle. To do this turn the switch OFF / ON (wait a second before switching back on). Switch OFF / ON to restart the colour cycle. To reset to white, switch the lights off for 5 seconds, and then back on.



Cleaning and Maintenance

LUMISHORE lights require simple cleaning. Lights should be checked often to ensure the light body and lens area are free from sea growth. In the event that your light requires cleaning, we recommend the use of a soft cloth or soft bristled brush.

- DO NOT use any abrasive cleaning materials as these may damage the body of the light.
- DO NOT use any cleaning fluids that contain solvents, acids or alkalis.
- DO NOT clean using pressure washing or sandblasting equipment.

Slight discolouration of body may occur over life. This does not affect performance, and is not subject to warranty.

Due to nature and high build quality it may on rare occasions be possible to see small levels of condensation, this is normal for high power LEDs and will disappear after cooling and does not harm operation in any way.

If the lights are covered for any reason, e.g maintenance, or painting DO NOT switch the lights on until the covers are removed.

Warranty

LUMISHORE Ltd warrants the SMX 93 to be free from defects in workmanship and materials for a period of two years, starting from the date of original purchase. Misuse, abuse, improper installation, neglect, improper shipping, damage caused by disasters such as fire, flood, and lightning, installation by unqualified personnel, unauthorized repair or modification will void this warranty. For the avoidance of confusion and doubt, non-compliance with all installation, maintenance and operating instructions in this document constitute non-conformance with warranty terms.